
Financial Literacy, Stock Market Awareness and Capital Market Participation of an Emerging Stock Market

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ABSTRACT:

This study on “Financial literacy, Stock Market Awareness and Capital Market Participation of an emerging stock market” focused on the case of Rwandan Stock Exchange had a purpose of investigating how stock market awareness of leaders of selected organizations affects their level of participation on Rwandan capital market.

Conducted as descriptive correlative design, this research collected both qualitative and quantitative data using a questionnaire and interview as tools from a sample of 91 organizations. The researcher used simple random sampling technique and toggled systematic sampling techniques for sample selection. The collected data was treated with SPSS using both descriptive statistics (frequency, percentage and Mean interpretation) and inferential statistics (correlation analysis, and one way ANOVA tests) to analyze responses made to each research question.

The main findings are that Directors have a high financial literacy while the level of organizations’ participation in the Rwandan stock market is moderate; the application of financial literacy of Directors in daily business is high. However, their organizations’ current level of participation on Rwandan stock market is low. Concerning the differences among sectors of activities, the research found that Commercial Banks have the highest stock market awareness with a highest while the insurance companies have the highest stock market participation. The Manufacturing or trading companies have the lowest stock market awareness as well as the lowest level of stock market participation.

As conclusion, the research the research confirmed that there is a significant relationship between the directors' awareness of the stock market functioning and the level of organizations' participation in the Rwandan stock market since the level of significance is 0.000 less than 0.05 and that there is significant difference in extents of awareness and levels of participation among sectors of activities of companies under the study.

The researcher recommends to the CMAC and Government to revise the law regarding the minimum value of bonds and listing requirements. CMAC should prepare a development program or public awareness and financial literacy training targeting large industries to increase the level of their stock market awareness, awareness of existing policies, incentives, laws and regulations and this will attract them to the stock market.

Key words: *Financial Literacy, Stock market participation, emerging stock market, developing countries*

INTRODUCTION

Background and scope of the problem of participation in emerging stock market

In the 1990s many countries in Africa set up stock exchanges as a precondition for the introduction of market economies under the structural adjustment programs propagated by the international monetary institutions and to facilitate the privatization of state owned enterprises (Wambui: 2005). As in many developing countries financial markets play an important role in the process of economic growth and development by facilitating savings and channeling funds from savers to investors. (Rajni and Mahendra: 2007).

According Wambui (2005) the World Bank reports how in developing countries, particularly in Sub-Saharan Africa, financial markets are dominated by commercial banks, which have not been reliable sources of long-term financing. The non-bank sources of medium and long-term financing are generally, underdeveloped. The short-term natures of commercial banks' assets and liabilities as well as regulatory reserve requirements in many countries render them

(banks) incapable of supplying long-term capital. The high yielding short-term government treasury bills have, therefore, resulted in “crowding out” of the private sector as commercial banks hold large portions of their asset portfolios in the government bills. In this regard that Carmichael and Pomerleano (2005) suggest that capital markets are considered better avenues of mobilizing domestic and international capital.

As started by IMF (2005), Rwanda’s economy has made considerable progress in overcoming the devastating consequences of the 1994 genocide, but economic performance is vulnerable to shocks, in particular a sharp fall in aid flows. The domestic financial sector still faces a poor environment with economic activity concentrated in a few sectors and a weak credit culture. There are serious shortcomings in the accounting and auditing systems and the institutional, legal, and judicial frameworks. The program of recapitalization and privatization started after 1994 has strengthened the short-term resilience of banks but structural weaknesses remain. Banks would have difficulties coping with the second order effects from a prolonged decline in aid flows and are heavily exposed to a few large borrowers. The Rwandan financial system remains shallow, especially outside the banking sector, and access to credit remains limited apart from a network of savings and loans cooperatives. As a result, for Capital market development, this report recommends to develop cost effective solutions to address the lack of long-term savings and credit, such as leasing. For many years, Rwandan business environment has been using money market as main source of finance. It is in the beginning of year 2008 that the Government of Rwanda has established the capital market advisory council (CMAC) to run the Rwandan stock market as over the counter market. Since the beginning of CMAC in 2008, it focuses workshops all over the country explaining to the public and business people how the capital market functions and invite them to participate towards the take-off of the capital market in Rwanda. The low level of activity on Rwandan capital market was first identified by Scott (2009) when he listed Rwanda among sub-Saharan countries having low level of activities on their capital market. The following CMAC’s annual reports and quarterly report of year 2010

(GoR: 2010) also shows clearly this low level of activity on Rwanda financial market. In primary market the government and only three private companies have traded their debts and Equities securities so far. The bonds market has traded so far only six Government bonds and one bond belonging to the BCR (Banque Commerciale du Rwanda). The equity market is yet to take off. Only two Kenyan companies cross listed their equities. One is an international bank, KCB (Kenya Commercial Bank) that has been trading its shares; another is NMG (Nation Media Group) also from Kenya. Thus the low level of capital market participation by local investors

This low level of participation is a significant problem to the well-functioning of capital market. In this regard, CMAC highlights that an organized capital market or stock market has three components. These are: *One*, the listed securities or stocks issued either by Government or companies; *Two*, the investors or the public who own the securities, and *Three*, the intermediaries or middlemen called stockbrokers. The stockbrokers are members of the OTC market who are authorized to sell and buy shares or bonds on behalf of the investing public. In Rwanda, 8 members are listed as stockbrokers. Since only the condition number three seems fulfilled, the two other conditions involve the willingness of the participants and this may be achieved by the public awareness about the functioning of the capital market

To support capital market development, especially the equity market, the government has decided to sell shares through privatization in a number of companies where it holds shares. The list of targeted companies is long, and they are still at the stage in preparations for the first ever IPO (Initial Public Offer) on the Rwandan over-the counter market (GoR: 2008).

In secondary market, the same securities have been traded as follows as started by the quarterly report of the CMAC: The Treasury bonds that were trade in the secondary market so far are worth 474,300,000 (four hundred seventy four million three hundred thousand Rwandan francs) in 55 deals. The 10 year BCR bond that will mature in 2017 with periodic

interest of 9% per annum was transacted in 3 deals worth Rwf 150,000,000 (One hundred fifty million Rwandan francs). At the launch of the ROTC market in Jan 2008.

Since the cross listing of KCB shares in June 2009, the ROTC recorded a total turnover of Rwf 13, 952,300 from 84,800 KCB shares traded on the ROTC market in 55 deals.

Rwandan Stock Market performance since inception to December 2010

This section talks of size, volume of trade and market liquidity of Rwandan stock market in terms of equity and debt instruments traded up to the end of year 2010. It shows also the performance of both local and foreigners companies cross-listed on Rwandan stock market

Primary market activity

For the Bonds market, a total of Rwf 20.75 billion has been raised through bonds. Six Government bonds worth Rwf 19.75 billion have been issued and one corporate bond from BCR bank worth Rwf 1 billion was issued and they were listed on the OTC market. Some of these bonds have matured. With the recent listing of a five year government bond of Rwf 3.5 billion that will mature in 2017, the total outstanding government bonds are Rwf 14.5 billion and the BCR bond of Rwf 1 billion which makes it a total of Rwf 15 billion outstanding bonds.

The Nation Media group cross listed its shares on the Rwandan market in early November and this brings the number of cross listed securities to two, both KCB and NMG are from Kenya. The equity market is yet to take off. A part from the cross listing of KCB shares and Nation Media Group (NMG) early November 2010, the government has decided to sell shares through privatization in a number of companies where it holds shares. The list of targeted companies is long, but six of them have been targeted as priority to list on ROTC and one of them, BRALIRWA SA, a local brewery, and the Bank of Kigali (BK) was at later stage of preparation for their first domestic IPO.

Secondary market trading

For the Bonds market, trading operations commenced on 31st January 2008 on the Rwanda OTC market on the launch of the Capital market operations. To date, the bond market transacted a total turnover of Rwf 654, 400,000 (six hundred fifty four million four hundred thousand Rwandan francs) in 60 deals. The bond market is frozen. For instance it did not record any transactions during the last quarter period of the year 2010.

For the equity market, the equity market was activated in June 2009 with the cross listing of KCB shares. Since the cross listing in June 2009 up to the end of December 2010, the total number of shares traded on the ROTC market is 159,800 in 97 transactions, and the total turnover is Rwf 26, 999,360. The equity market recorded a total turnover of Rwf 8,881,560 from 46,500 KCB and 1,000 NMG (Nation Media Group) shares traded on the ROTC market in 20 deals since November 2010. The KCB shares averaged Rwf 173 and NMG averaged Rwf 1,198 for the period.

Table 1: Monthly trading statistics since June 2009 to December 2010)

	June 2009 – January 2010	February – July 2010	August - October 2010	November- December 2010
Volumes traded	76,300	22,000	14,000	47,500
Turnover (Rfw.)	12, 522,500	3, 511,500	2, 063,800	8,881,560
Daily Avg. Turnover(Rwf)	71,900	27597	49243	203,099
Average Share price of KCB	165	159	147	173
Average Share price of NMG	—	—	—	1,198

Source: CMAC, quarterly market performance report: October – December 2010

Problem Statement

The beginning of Rwandan over the counter market (ROTC) in January 2008 was a solution to the Rwandan business environment relying on a fragile financial system dominated by banks. These banks had limited sources of long-term financing and still facing the consequences of the 1994 genocide. The government of Rwanda came up with the Capital Market Advisory Council with a view of developing a capital market as suggested by Carmichael and Pomerleano (2005).

Paradoxically, the private sector seems to ignore this new option of financing. Only three private companies have traded their debts and Equities securities so far. One is a local company, BCR (Banque Commerciale du Rwanda or Rwandan Commercial Bank) that has traded its bond and two other companies are Kenyan companies cross listed their equities : KCB (Kenya Commercial Bank) and NMG (Nation Media Group). Besides these three companies, the Government of Rwanda has raised capital through the issue of six government bonds and again it has planned to sell its stake in a number of institutions where it holds shares with the aim of supporting this emerging capital market.

Since this Rwandan capital market is initiated by the government and still it (the Government) is listing its bonds to stimulate the growth of the market, our attention along this study focused on the responsive attitude of the public and private investors towards this capital market. Whether they cooperate or resist to the new system. This study investigated the reasons behind the low level of attraction and participation of local investors on the stock market.

Purpose and the hypothesis of the Study

As a general objective, this study aimed to investigate how stock market awareness of leaders of selected organizations affects the level of participation of these organizations on Rwandan capital market. This study also investigated the reasons behind the low level of participation of local investors on the Rwanda capital market. The research had specific objectives:

1. To measure the extent of stock market awareness of stock market functioning;
2. To measure the level of organizations' participation in the Rwandan stock market;
3. To determine the relationship between the extent of directors' awareness of the stock market functioning and the level of organizations' participation in the Rwandan stock market;
4. To determine if there is a significant difference in levels of awareness and levels of participation among sectors of activities of companies under the study;

As the Hypothesis, the null Hypothesis (H0a) states that there is no significant difference in extents of awareness and levels of participation among sectors of activities of companies under the study while (H0b) states that there is no significant difference in extents of awareness and levels of participation among sectors of activities of companies under the study

THEORETICAL PERSPECTIVES OF FINANCIAL LITERACY AND CAPITAL MARKET PARTICIPATION:

According to Bonello (2008), Stock Exchange is an organized market for buying and selling financial instruments known as securities, which include stocks, bonds, options, and futures. Most stock exchanges have specific locations where the trades are completed. For the stock of a company to be traded at these exchanges, it must be listed, and to be listed, the company must satisfy certain requirements. But not all stocks are bought and sold at a specific site. Such stocks are referred to as unlisted. Many of these stocks are traded *over the counter*. That is, by telephone or by computer.

.The stock market participation in this research is based on the capital market theory

According to (Prasanna: 2006), the capital market theory builds upon the Markowitz
The main assumptions of the capital market theory as by Markowitz are as .portfolio model

Investors follow Markowitz idea of the efficient frontier and choose to invest in portfolios along the frontier. This rate remains static for any amount of money. When choosing investments, this indicates that fractional shares can be purchased and the stocks can be infinitely divisible. Assume that investors' results are not affected by taxes and transaction costs. When determining the expected return, assume that all investors have the same probability for outcomes. Assume the market theory and that markets are efficient and that no mispricings within the markets exist.

There exist very few surveys that provide information on both financial literacy and variables related to financial decision-making (for example saving, portfolio choice, and retirement planning). To remedy this lack of data, different authors used different parameters to measure financial literacy. According to Lusardi, Annamaria, Rooij and Alessie (2007) Lusardi and Mitchell (2006) used questions aiming to test basic financial knowledge related to the working of interest compounding, the effects of inflation, and risk diversification. They found that financial illiteracy is widespread and particularly acute among specific groups of the population, such as women, the elderly, and those with low education. While these studies focus on data from the US, surveys from other countries show very similar results. A study by the OECD (2005) and work by Lusardi and Mitchell (2007b) review the evidence on financial literacy across countries and show that financial illiteracy is a common feature in many other developed countries,

Financial illiteracy has implications for household behavior. Bernheim (1995, 1998) was the first to point out not only that most households cannot perform very simple calculations and lack basic financial knowledge, but also that the saving behavior of many households is

dominated by crude rules of thumb. Similarly, Lusardi and Mitchell (2006, 2007a) show that those who display low literacy are less likely to plan for retirement and, as a result, accumulate much less wealth. This finding is confirmed in the work by Stango and Zinman (2007), which shows that those who are not able to correctly calculate interest rates out of a stream of payments end up borrowing more and accumulating lower amounts of wealth. Agarwal, Driscoll, Gabaix and Laibson (2007) further show that financial mistakes are prevalent among the young and elderly, who are those displaying the lowest amount of financial knowledge.

The question linking financial literacy and capital market participation is still why so many households do not hold stocks (Campbell :2006). To overcome the problems with some of the previous studies by providing comprehensive measures of financial literacy as well as providing an evaluation of the quality of the literacy data, Lusardi, Annamaria, Rooij and Alessie (2007) link financial literacy with an important economic outcome: participation in the stock market.

In this research, the researcher was filling these gaps by applying as many parameters as possible to the case of Rwanda in order to understand better the relationship between financial literacy or awareness and participation in Rwandan capital market

METHODOLOGY:

This study on Stock market awareness of directors and Capital market participation of selected organizations in Rwanda was conducted between 2008 and 2010 through a descriptive correlative design. The study starts from 2008 because it is when the stock market was launched in Rwanda. The study was conducted on managing directors and directors of finance of 63 institutions both private and public using a questionnaire and interview.

Data and variables

Financial literacy refers to the ability to use knowledge and skills to manage one's financial resources effectively for lifetime financial security. It includes the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future, and respond competently to life events that affect every day financial decisions, including events in the general economy. In this study, the researcher measured financial literacy of companies by the knowledge, skills and attitude for raising money, saving, and investing. Specifically, the financial literacy and stock market awareness of directors was measured by the Financial literacy of directors regarding interest rate calculation, exchange rate calculation, business diversification and portfolio management; Knowledge of location of Rwandan stock market/CMAC; Awareness of stock market education, sensitization programs and information availability from CMAC; The knowledge of Rwandan stock market requirements in initial public offer (IPO) process, listing process, buying or selling securities and other legal requirements in total assets and capital and brokerage services.

Capital market is long term investment and lending market involving institutions that deal with securities with a life of more than one year. On this market, long time capital is raised by industry and commerce, the government, and local authorities. The money comes from private investors, insurance companies, pension fund, and banks. In this study, the capital market participation in refers to the level of capital market performance by listing, initial public offer (IPO), selling and buying activities, market liquidity, Size and volume of trade of Rwandan stock market in terms of equity and debt instruments traded up to the end of year 2010. In relation to the financial literacy, the capital market participation of organizations in Rwandan stock market was measured by the application of directors' financial literacy in daily business; Visiting, inquiring information or using stock market information available from Rwandan stock market authority-CMAC; company's current and prospective level of participation on Rwandan capital market and the fulfillment of conditions regarding initial

public offer (IPO) process, listing process, buying or selling securities and other legal requirements in total assets and capital and brokerage services.

However, this relationship between these variables can be modified by some extraneous variable such as economic climate, political climate, clear legal and regulatory environment where by businessmen can drop out their activities due to legal constraints, or due to the economic and business trend or just due to the political uncertainty.

RESEARCH DESIGN

This study was conducted through a descriptive correlative design. The researcher collected both quantitative and qualitative data. The descriptive correlative design is ideally suitable for extensive research and thus suits to this study because it has the advantages of investigating the population and discovering the occurrence of the problem facing companies in listing and trading at Rwandan stock market.

RESEARCH POPULATION

The research covered the organizations present in Rwandan represented here by big or large companies all over the country and the information was for the period of three years between 2008 and 2010 and was conducted within nine months during the year 2011.

The population comprised of 182 Managing directors and Directors of finance coming from 91 selected organizations operating in Rwanda. The researcher targeted large industries present in the country plus significant service companies. These large companies were chosen as targeted population because they are likely capable to participate on stock market either by listing or trading securities on secondary market. Other small businesses or individuals can join once there is a vibrant secondary market. The large service companies were all banks (specialized banks, commercial banks and microfinance bank), insurance companies, telecommunication companies and the pension fund. The selected organizations comprises all 70 large manufacturing industries as categorized by MINICOM plus 20 large service

industries and 1 governmental authority in charge of capital market in Rwanda, which is CMAC. According to PSF (2008), MINICOM defines large enterprise as any company having more than RwF 75,000,000 of net capital investments or more than RwF 50,000,000 of annual turnover or more than 100 Employees.

Sample Size

A sample of 126 respondents was selected in a population of 182 Managing directors and Directors of finance coming from 91 selected organizations operating in Rwanda. Since the researcher had to select 2 respondents from each organization, 126 respondents included in the samples are from 63 institutions. The computation was rounded to nearest even number. Since the population is made of different categories of organizations, a stratified sampling was used to ensure the proportional representation of all categories in the sample selected. The sample size determination follows the Slovine's formula of sample size determination. The formula is $n = \frac{N}{1 + N e^2}$ The Formula helped to determine the sample size (n) from a given population (N) at a 95% confidence level and 5% margin of error (e). Since the total population number (N) is 182, the researcher is able to apply the formula and find the sample size (n). $n = \frac{182}{1 + 182 \cdot 0.05^2} = 126$ respondents.

Sampling Procedure

This study employed a stratified sampling technique, simple random sampling technique and toggled systematic sampling techniques.

A stratified sampling was used in sample size determination to ensure the proportional representation of all categories of organizations in the sample selected.

Toggled systematic sampling technique was used for large manufacturing companies. According to Suwa (2010) when the systematic random sampling is not possible, the

researcher may create batches in the elements and then proceed by eliminating same element from every batch following a systematic way. Toggled systematic sampling procedure gives discretion to the researcher to choose where to start eliminating respondents to maintain or to jump in every score in order to remain only with a number of respondents needed for the sample. Since the researcher has to select 48 companies out of 70 (96 respondents), systematic random sampling technique seems to be difficult because 70 divided by 48 gives a sample size 1.2 companies to jump. Instead the researcher proceeded by eliminating 22 companies counting from the 5th and eliminating 1 company after every 2 enumerations. In other words, elements rejected are 5th, 8th, 11th and so on up to 68th by maintaining a score of 3 companies. According to this toggled systematic sampling, a sample size for eliminating or jumping unwanted elements becomes 3 companies. In this case the researcher systematically rejected 22 companies out of 70 and remained with 48 companies to include in sample. So systematically, following the list of large industries provided by MINICOM, in every batch of 3 companies the researcher maintained 2 companies and exclude the 3rd. The researcher take a batch of 3 companies because 70 divided by 22 is approximately 3.

A simple random sampling technique was used to collect information from all service companies: Insurance companies, specialized banks (BHR, BRD), Commercial Banks, Microfinance Bank (Urwego) and Telecommunication companies. A simple random sampling technique was used because the number of respondents in each of these categories is relatively small for systematic random sampling. A random sampling was done by pouring on Table small folded papers on which written names of all organizations in each concerned stratum and then the desired numbers of papers are randomly picked.

RESEARCH INSTRUMENT

The research used an interview and a questionnaire as main instruments of collecting data. Interview was for CMAC authorities while the questionnaire was for selected companies. Questionnaire and interview are used because they were considered appropriate tools to

collect qualitative and quantitative data in a descriptive correlative design. The questionnaire was made of both closed questionnaire and open ended questionnaires. Respondents were managing directors and directors of finance from selected organizations.

DATA ANALYSIS

The data analysis was done using Statistical package for Social Scientists (SPSS). After collecting data, the researcher organized questionnaire by numbering them for validation and checking purpose. Questions were coded and data entered into computer system. Processed data was stored in form of Tables and charts from which meaningful information was produced.

Quantitative data were presented into tabular form and frequencies. For qualitative data, the researcher wrote write them into paragraphs. The researcher then merged Tables and paragraphs to explain the figures. The statistical analysis used both descriptive and inferential statistics to analyze responses made to each research question as follows:

The frequency and percentage were used for respondents' profile and their ideas concerning reasons for the non-participation; Mean interpretation were used to determine the levels. Awareness of directors and the level of organizations' participation respectively mean interpretation is used to determine these levels whether they are Very high, high, moderate or low depending to their responses corresponding to the extent of their agreement or disagreement with the questions. The range between respondents is 0.75 given by $(4-1)/4$. This is the interpretation of the responses given:

Range	Response made	Interpretation
3.26 – 4.00	Strongly Agree	Very High
2.51 – 3.25	Agree	High
1.76 – 2.50	Disagree	Moderate
1.00 – 1.75	Strongly Disagree	Low

The one way ANOVA test and the multiple comparison analysis were used to determine the extent to which the groups of respondents differ among themselves to see whether there is any significant difference in extents of awareness and levels of participation among sectors of activities of companies under the study.

ETHICAL CONSIDERATIONS

During the research period, the researcher also sought for authorization to conduct study from respondent's institutions and got consent of the respondents.

The researcher does not intend to reveal the source of information gotten during the research. The researcher is be guided by integrity, respect of respondents, humility and neutrality during the research by ensuring the confidentiality and neutrality to respondents. In order to be available after the research for whoever interested by the findings the researcher showed his own contact on the questionnaire.

RESULTS

Profile of Respondents : The Table 2 gives us details about respondents. The returned questionnaires are 122 plus two interviews made at the CMAC, which makes the rate of return of questionnaires of 98% or 124 out of 126 targeted respondents. The data presented in the Table are responses to the questions number one, two, three and four.

Table 2: Profile of Respondents

Categories	Frequency	Percent
Sector of activity		
insurance companies	6	4.9
Specialized banks (BRD,BHR)	2	1.6
Commercial banks	12	9.8
Microfinance bank (Urwego)	2	1.6

Telecommunication company	4	3.3
Industrial/ Manufacturing or trading company	96	78.7
s position'Respondent		
Managing Director	61	50.0
Finance Director	61	50.0
Gender		
Female	22	18.0
Male	100	82.0
Education level of respondents		
Primary or Secondary level	3	2.5
Undergraduate Level	105	86.1
Postgraduate Level	14	11.4

Primary data, from Researcher computation, 2011

According to the Table 2, 4.9 % are from insurance companies; 1.6 % are from specialized banks (BRD,BHR); 9.8 % are from Commercial banks; 1.6 % are from Microfinance bank (Urwego); 3.3 % are from Telecommunication company and 78.7 % are from Industrial/ Manufacturing or trading company. However, during our analysis further the deep multiple comparison analysis was used to determine the extent to which the groups of respondents differ among themselves and which category of companies is concerned.

Concerning the are %50shows that 2the Table ,s position in their organization'Respondent ors were chosen These direct .are Finance Director %50Managing Director while remaining .because they are able to explain the financial decisions of their organizations

are female %18the same Table shows us that ,Concerning Gender status of the respondents .are male % 82while

of %2.5the Table shows that ,respondents Lastly regarding the Education level of %11.5Undergraduate Level and %86.1 ,respondents possess a primary or secondary level .have Postgraduate Level

Based on the Table 2, specialized banks and microfinance banks are few and represent 1.6% each while Industrial/ Manufacturing or trading companies dominate large companies in Rwanda and represent 78.7%. The number of women leading large companies as managing directors or directors of finance is very low (18%). The level of education of these directors is good with 97.5% having undergraduate or postgraduate.

The extent of stock market awareness in developing countries

The objective of this section seeks to measure the extent of directors' awareness of stock market functioning.

Table 3: Extent of Directors' awareness of stock market

N=122

Indicators	Mean	Interpretation	Rank
Financial literacy regarding interest rate calculation	3.09	High	1
Financial literacy regarding exchange rate calculation	3.06	High	2
Financial literacy regarding business diversification and portfolio management	2.98	High	3
Knowledge of location of Rwandan stock market/CMAC	2.90	High	4
Awareness of information availability from CMAC	2.49	Moderate	5
Awareness of stock market education programs offered by CMAC	2.46	Moderate	6
Awareness of stock market sensitization programs offered by CMAC	2.43	Moderate	7
Awareness of total assets requirements of Rwandan stock market	2.32	Moderate	8
Awareness of capital requirements of Rwandan stock market	2.30	Moderate	9

The knowledge of Rwandan stock market requirements in Buying securities	2.15	Moderate	10
The knowledge of Rwandan stock market requirements in selling securities	2.14	Moderate	11
The knowledge of Rwandan stock market requirements in initial public offer (IPO) process	2.13	Moderate	12
The knowledge of Rwandan stock market requirements in listing process	2.12	Moderate	13
The knowledge of Rwandan stock market requirements in other legal requirements	2.11	Moderate	14
Awareness of existence of brokerage services	2.05	Moderate	15
Mean average	2.40	Moderate	

Primary data, from Researcher computation, 2011

The above Table 3 shows that the extent of directors' awareness of stock market functioning is moderate with a mean of 2.40 on average. Regarding the directors' stock market awareness, they have a high financial literacy regarding interest rate calculation, exchange rate calculation, business diversification and portfolio management and the location of stock market while they have a little awareness of existence of brokerage services where the mean is only 2.05.

The directors' financial literacy is high. As said before, the research conducted by Lusardi, Annamaria, Rooij and Alessie (2007) Lusardi and Mitchell (2006) concerning the financial literacy and awareness to test basic financial knowledge related to the working of interest compounding, the effects of inflation, and risk diversification found that financial illiteracy is widespread and particularly sever among specific groups of the population, such as women, the elderly, and those with low education. In our case of Rwanda, it is less threatening because women and low educated directors are not many as shown by this research.

Interest rate is the key issue on stock market because the rise and fall of prices are expressed in terms of interest rate. For the knowledge of exchange rate determination, is important for Rwandan investors because of stock market integration investors need to compare currencies. Concerning the inflation, the knowledge of the effect of inflation on business is important for Rwandan investors because activities of stock market fluctuate much and investors need to have enough knowledge of the value of money in order to decide when to buy or sell securities. Finally, the knowledge of the portfolio management is important for Rwandan investors because activities of investing in any financial security concern portfolio management and risk analysis. Investors need to have enough knowledge of security analysis and portfolio management in order to be able to deal with financial securities available on stock market.

Concerning the level of knowledge if information available from CMAC which is moderate, it is a problem because the availability of information is a key factor in financial market (Timmermann & Granger: 2004). They revealed that for a given market to be called effective there must be different factors including information availability.

The knowledge of Rwandan stock market requirements in initial public offer (IPO) process, listing process, buying or selling securities and other legal requirements; awareness of existence of brokerage services and awareness of total assets and capital requirements are all moderate. The knowledge of these requirements of Rwandan stock market and the functioning of stock market is important for all companies wishing or likely to participate on a given capital market.

The level of organizations’ participation in the Rwandan stock market

Table 4: Level of O'rganizations Participation

N=122

Indicators	Mean	Interpretation	Rank
Application of interest rate calculation in daily business	3.02	High	1

Application of exchange rate calculation in daily business	3.01	High	2
Application of business diversification and portfolio management in daily business	3.00	High	3
Company's prospective of participation on Rwandan capital market	2.21	Moderate	4
Visiting Rwandan stock market or stock market authority-CMAC	2.10	Moderate	5
inquiring information from Rwandan stock market authority-CMAC	2.07	Moderate	6
using stock market information available from Rwandan stock market authority-CMAC	2.05	Moderate	7
Company's level of fulfillment of requirements regarding listing your company on Rwandan stock market	2.01	Moderate	8
Company's level of fulfillment of requirements regarding initial public offer (IPO) on Rwandan stock market	2.00	Moderate	9
Company's level of fulfillment of requirements regarding buying securities on Rwandan stock market	1.99	Moderate	10
company's level of fulfillment of Rwandan stock market's conditions regarding total assets requirements	1.98	Moderate	11
Company's level of fulfillment of Rwandan stock market's conditions regarding capital requirements	1.97	Moderate	12
Company's level of fulfillment of requirements regarding selling securities on Rwandan stock market	1.96	Moderate	13
Company's current level of participation on Rwandan capital market	1.75	Low	14
Having any brokerage services	1.70	Low	15
Mean average	2.34	Moderate	

Primary data, from Researcher computation, 2011

According to the Table 4 the level of organizations' participation in the Rwandan stock market is moderate a mean of 2.34 on average. Let us recall that the extent of directors' awareness of stock market functioning was also moderate with a mean of 2.40 on average. This is in accordance with what was said by Lusardi, Annamaria, Rooij and Alessie (2007)

stating also that financial literacy and stock market awareness of the public determine the level of their participation or not in the stock market.

Regarding the application of financial literacy of Directors in daily business in terms of interest rate, exchange rate and portfolio management is high with a mean of 3.00 and above. Despite the high knowledge of Directors, the organizations' current level of either using brokerage services or participation in Rwandan stock market is low with a mean of 1.7. The low level of company's current of participation on Rwandan capital market can be explained by the fact that the level of using or having brokerage services is also low a significant number of companies miss important information and opportunity of investing due to lack of financial advisers. The practice on the capital market is that buying client or selling client approaches stockbroker, then these buying stockbroker and selling stockbroker attends trading sessions at the trading floor. All stockbrokers attend the session; they make settlement and deliver the new bond or share certificate to the buying client.

The level of participation may also due to different reasons like companies' policies, their priorities and so much uncertainty or lack of information regarding stock market functioning.

The relationship between the respondents' awareness of the stock market functioning and levels of organizations' participation in the Rwandan stock market

The fifth objective seeks to determine the relationship between the respondents' awareness of the stock market functioning and levels of organizations' participation in the Rwandan stock market.

Table 5: Pearson's Correlations analysis of Independent Variable Vs Dependent Variable

Variables correlated	r-value (Pearson correlation)	Sig.	Interpretation	Decision on Ho1
STOCK MARKET AWARENESS				

OF DIRECTORS Vs ORGANIZATIONS' STOCK MARKET PARTICIPATION IN RWANDA	.795	.000	Significant relationship	Rejected
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0.05 Level of significance

Using Pearson's Correlations the relationship is significant. It is .795. This leads us to the confirmation that there is a significant relationship between the directors' awareness of the stock market functioning and levels of organizations' participation in the Rwandan stock market since the level of significance is 0.000 less than 0.05. Therefore, the null hypothesis one is rejected.

Our findings regarding to the stock market participation are in accordance with those of Lusardi et Al (2007) and Rajni and Michael (2006) stated that the level of activities of a capital market reflects the level of participation of all investors or business bodies. This study linked this expected participation and awareness of capital market functioning by those directors responsible for their institutions' participation in Rwandan stock market. This strong relationship means that any improvement in Directors' stock market awareness will improve the level of participation of their organization

The difference in extents of awareness and levels of participation among sectors of activities of companies

The fourth objective seeks to determine if there is a significant difference in extents of awareness and levels of participation among sectors of activities of companies under the study. The following Table is the ANOVA test for measuring the level of the differences.

Table 6: The Difference in Extents of Awareness and Levels of Participation among Sectors of Activities of Companies

Variables	Categories	Mean	F	SIG	Interpretation	Decision on Ho
STOCK MARKET AWARENESS OF DIRECTORS	Insurance companies	3.6333	39.238	.000	Significant difference	Rejected
	Specialized Banks (BRD& BHR)	3.6334				
	Commercial Banks	3.6722				
	Microfinance Bank	3.6667				
	Telecommunication companies	3.3667				
	Industries/ Manufacturing or Trading companies	2.1299				
ORGANIZATIONS' STOCK MARKET PARTICIPATION IN RWANDA	Insurance companies	3.4889	62.904	.000	Significant difference	Rejected
	Specialized Banks (BRD& BHR)	3.2667				
	Commercial Banks	3.4167				
	Microfinance Bank	2.7667				
	Telecommunication companies	2.6833				
	Industries/ Manufacturing or Trading companies	1.8917				

0.05 Level of significance

As shown in the Table 6, there is a significant difference among groups/ sectors of activities since the ANOVA test is significant with level of significance equal to 0.00 for both levels of awareness and levels of participation among sectors of activities. This means that there is a significant difference among groups/ sectors of activities. This made us confirming that there is a significant difference in extents of awareness and levels of participation among sectors of activities of companies under the study. Therefore, the null hypothesis two is rejected.

Regarding the stock market awareness of directors, Commercial Banks have the highest stock market awareness with a highest mean of while the 3.6722 Manufacturing or trading

companies with a mean of 2.1299. For the organizations' stock market participation in Rwanda, Insurance companies have the highest stock market participation with a highest mean of 3.4889 while Industries/ Manufacturing or Trading companies have the lowest stock market awareness with the lowest mean of 1.8917.

We need further analysis to know which category of companies is concerned seeking for special attention in order to recommend better and special intervention. The multiple comparison Table (see Appendix I) show that manufacturers or industrial companies differs much from every other groups in stock awareness and in stock market participation. Inside every variable, either the extent of awareness of directors or the level of participation of organizations, each group or sector of activity is isolated and compared with the rest of groups. For each exercise, the result is that the group of “Industries/ Manufacturing or Trading companies” has a significant test less than 0.05 level, i.e where Sig. = 0.00; in most cases it has a highest Mean Difference (I-J) and a least Std. Error. This means that this group is critical. This shows that any effort of public education regarding the functioning of stock market or other related stock market awareness programs should target these Industries/ Manufacturing or Trading companies or non financial companies because they are potential participants of stock market since they represent a significant number of large companies in Rwanda. In fact, financial enterprises intervene much in listing facilitation or buying or selling securities. So stock market needs non financial companies to list their securities to boost market activities. Knowledge of the functioning of stock market is important for non financial companies because one to participate on capital market need to have some knowledge about the functioning of stock market.

After finding that the company's current level of participation on Rwandan capital market is low, even given the moderate level of company's prospective of participation on Rwandan capital market, our attention now is to know what companies wishes to attract them to participate in either primary market (listing) or secondary market (investing or buying and

selling securities). The following Table tells us about what companies wish should be done to booster the level of activities on Rwandan stock market.

Table 7: Conditions for companies wishing to participate on Rwandan capital market

	Frequencies	Percentage
Information availability and information dissemination	26	25
Teaching companies the advantages of capital market and incentives available	20	19.2
Public education and sensitization about capital market	18	17.3
Government to create more incentives for listing companies	10	9.6
Assessing the profitability and retention policies of targeted companies	8	7.7
Visiting and bringing more companies to the capital market in order to have more securities	6	5.7
Changing Rwandan investors' mentality on liquidity and competition	4	3.8
continuous savings and economic growth	4	3.8
Developing a vibrant secondary market	4	3.8
Requirements awareness	2	1.9
Training on the functioning of capital market in Rwanda	2	1.9
TOTAL	104	100

Primary data, from Researcher computation, 2011

The Table 7 gathers data provided by responses to the question number eighteen. It lists different views of companies about needs for boosting Rwandan stock market. A quarter of them (25%) think that they must be enough information availability and information

dissemination to the public. Others (19.2%) point out the necessity of teaching companies the advantages of capital market and incentives available, while (19.2%) also claims for public education and sensitization about capital market. Some companies (9.6%) wish that Government should create more incentives for listing companies while (7.7%) think that there should be assessment of the profitability and retention policies of targeted companies in order to advise them on what to improve in order to be eligible. In the same way, (5.7%) of companies wish Government or CMAA authorities to visit and bring more companies to the capital market in order to have more listed companies, more securities and more participants. In the same way, 1.9% of respondents propose public awareness about legal and requirements to deal on stock market while 1.9% also needs training on the functioning of capital market in Rwanda. Behavior of investors also was pointed out by 3.8%. They propose to change Rwandan investors' mentality on liquidity and competition because people are familiar with businesses that brings returns quickly, Other companies (3.8%) think that they need more insurance in country's policies like continuous saving culture and economic growth. Secondary market is still not attractive for 3.8% of companies. They want to see a vibrant secondary market that can attract them because they do not find more securities.

DISCUSSION

Regarding the profile of respondents, specialized banks and microfinance banks are few and represent 1.6% each while Industrial/ Manufacturing or trading companies dominate large companies in Rwanda and represent 78.7%. The number of women leading large companies as managing directors or directors of finance is very low (18%). The level of education of these directors is good with 97.5% having undergraduate or postgraduate level.

For the first research question concerning the extent of stock market awareness of directors of companies in Rwandan, the researcher found that the extent of directors' awareness of stock market functioning is moderate on average with a mean of 2.40. There is no problem in the extent of directors' financial literacy and of knowledge of location of Rwandan stock market.

Regarding the directors' stock market awareness, they have a high financial literacy regarding interest rate calculation, exchange rate calculation, business diversification and portfolio management and the location of stock market while they have a little awareness of existence of brokerage services where the mean is only 2.05. The Respondents' extent of awareness of stock market education, sensitization programs and information availability from CMAC; Their level of knowledge of Rwandan stock market requirements in initial public offer (IPO) process, listing process, buying or selling securities and other legal requirements; Their level of awareness of existence of brokerage services and Their level of awareness of total assets and capital requirements are all moderate.

For the question regarding the level of organizations' participation on the Rwandan stock market, the researcher found the following:

The level of organizations' participation in the Rwandan stock market is moderate a mean of 2.34 on average. Regarding the application of financial literacy of Directors in daily business in terms of interest rate, exchange rate and portfolio management is high with a mean of 3.00 and above. Despite the high knowledge of Directors, the organizations' current level of either using brokerage services or participation in Rwandan stock market is low with a mean of 1.7. The low level of company's current of participation on Rwandan capital market can be explained by the fact that the level of using or having brokerage services is also low a significant number of companies miss important information and opportunity of investing due to lack of financial advisers. The level of visiting, inquiring information or using stock market information available from Rwandan stock market authority-CMAC is moderate. Company's current level of participation on Rwandan capital market is low (mean=1.75) but the future is promising because the prospective level of participation of companies is moderate with a mean of 2.21

For the question whether there is a significant difference in extents of awareness and levels of participation among sectors of activities of companies under the study, the ANOVA test

proved that the difference among the groups exists in either extents of awareness of directors and levels of participation among sectors of activities with level of significance equal to 0.00 for both variables. Regarding the stock market awareness of directors, Commercial Banks have the highest stock market awareness with a highest mean of while the 3.6722 Manufacturing or trading companies with a mean of 2.1299.. For the organizations' stock market participation in Rwanda, Insurance companies havethe highest stock market participation with a highest mean of while 3.4889Industries/ Manufacturing or Trading companies have the lowest stock market awareness with the lowest mean of 1.8917.

For the question of knowing which category of companies is much differs from others, the multiple comparison Table (see Appendix I) shows that manufacturing or industrial companies are lagging far behind others in both stock awareness and in stock market participation.

The fourth research question seeks to know whether there is any relationship between the directors' awareness of the stock market functioning and levels of organizations' participation in the Rwandan stock market. The Correlations analysis proves the there is a significant relationship between the directors' awareness of the stock market functioning and levels of organizations' participation in the Rwandan stock market. The relationship is significant since the level of significance for is 0.000 less than 0.05. The Pearson's correlation coefficient is 0.795 i.e highly positively correlated.

Concerning the possible reasons for the non-participation other than stock market awareness of companies were given opportunities to speak out. They wish some conditions should be worked out in order to attract them for better participation. These are: information availability and information dissemination to the public, teaching companies the advantages of capital market and incentives available, public education and sensitization about capital market, Government should create more incentives for listing companies, advise them on what to improve in order to be eligible, to visit and bring more companies to the capital market in order to have more listed companies and have a vibrant secondary market, more securities

and more participants, needs training on the legal, requirements and functioning of capital market in Rwanda and finally to change Rwandan investors' mentality on liquidity and competition in order to invest for long term.

Based on the above findings, it is clear that Rwandan companies do not lack financial literacy except some industries or manufacturing companies. Some Rwandan companies, especially industries are keeping distance from stock market. They lack for awareness for the functioning and requirements of stock market, and yet they do not make effort to know. This lack for interest in stock market explains why of low level of participation on that market.

CONCLUSION

The findings showed that specialized banks and microfinance banks are few and represent 1.6% each while Industrial/ Manufacturing or trading companies dominate large companies in Rwanda and represent 78.7%. The number of women leading large companies as managing directors or directors of finance is very low (18%). The level of education of these directors is good with 97.5% having undergraduate or postgraduate level

Concerning the extent of stock market awareness of directors of companies in Rwandan, the researcher found that the mean average of the extent of stock market awareness of directors of companies in Rwandan is *moderate* with a mean of 2.40 on average. There is no problem in the extent of directors' financial literacy and of knowledge of location of Rwandan stock market. Regarding the directors' stock market awareness, they have a high financial literacy regarding interest rate calculation, exchange rate calculation, business diversification and portfolio management and the location of stock market while they have a little awareness of existence of brokerage services where the mean is only 2.05.

Concerning the level of organizations' participation on the Rwandan stock market, the researcher found that the level of organizations' participation in the Rwandan stock market is *moderate* with a mean of 2.34 on average. The level of organizations' participation in the

Rwandan stock market is *moderate* a mean of 2.34 on average. Regarding the application of financial literacy of Directors in daily business in terms of interest rate, exchange rate and portfolio management is *high* with a mean of 3.00 and above.

Despite the *high* knowledge of Directors, the organizations' current level of either using brokerage services or participation in Rwandan stock market is *low* with a mean of 1.7. The low level of company's current of participation on Rwandan capital market can be explained by the fact that *the level of using or having brokerage services is also low* a significant number of companies miss important information and opportunity of investing due to lack of financial advisers. The level of Visiting, inquiring information or using stock market information available from Rwandan stock market authority-CMAC is *moderate*. Company's *current level of participation on Rwandan capital market is low* (means=1.75) but the future is promising because the prospective level of participation of companies is moderate with a mean of 2.21

For the question of whether there is a significant difference in extents of awareness and levels of participation among sectors of activities of companies under the study, the ANOVA test proved that the difference among the groups exists in either extent of awareness of directors and levels of participation among sectors of activities with level of significance equal to 0.00 for both variables. The deep analysis shows that *manufacturers or industrial companies are lagging far behind others in both stock awareness and in stock market participation*. The Manufacturing or trading companies *have the lowest stock market awareness* with the lowest mean of 2.1299 and the *lowest level of participation* with the lowest mean of 1.8917.

Concerning relationship between the directors' awareness of the stock market functioning and the level of organizations' participation in the Rwandan stock market, *the relationship is significant* since the level of significance is 0.000. the Pearson's correlation coefficient is 0.795 i.e highly positively correlated.

Concerning the possible reasons for the non-participation other than stock market awareness of companies were given opportunities to speak out and point out information availability,

public education on the legal, requirements and functioning of capital market in Rwanda and so many others.

Finally for the researchers, the research findings topped up the existing body of knowledge regarding the functioning of capital market in Rwanda and the way investors respond to it. The study findings opened door for the future researchers interested by the stock market in Rwanda by suggesting the area for future research.

RECOMMENDATIONS

The researcher recommends to the Government of Rwanda and CMAC authority the development program for public education and training in following: Regarding the respondents' profile, the research found that Industrial/ manufacturing or trading companies dominate large companies in Rwanda and represent 78.7%. The number of women leading large companies as managing directors or directors of finance is very low (18%). The researcher recommends promoting women entrepreneurship and advocacy for women leadership in order to increase the number of women leading large business.

Concerning the extent of directors' awareness if stock market functioning, the research found that they do not have a problem in financial awareness and stock market awareness but they have a little awareness of existence of brokerage services where the mean is only 2.05. Therefore, the researcher recommends including and emphasizing on the subject of brokerage services in the Public education program targeting all companies. This is important because these individuals facilitate the buying and selling of financial assets. Brokers execute trades on behalf of clients. Again stockbroker attends trading sessions at the trading floor. All stockbrokers attend the session; they make settlement and deliver the new bond or share certificate to the buying client.

Concerning the Stock market participation, the research found that despite the high knowledge of Directors, the organizations' current level of participation in Rwandan stock market is low. The level of using brokerage services is also low. So, the researcher recommends including and emphasizing on the subject legal requirements and Stock market condition in the public education program in order to booster stock market participation. The content of education program should include stock market knowledge (location) and Financial literacy regarding interest rate calculation, exchange rate determination, effect of inflation on business and knowledge about the portfolio management on business or other related financial literacy, the advantages of capital market, and available incentives, legal and requirements and functioning of capital market (Equity market and Bond market) in Rwanda

Concerning the difference that might exist between sector of activities, the research found that the Manufacturing or trading companies have the lowest stock market awareness with the lowest mean of 2.1299. They have also the lowest level of participation with the lowest mean of 1.8917 (please see Table 6). The deep analysis shows that manufacturers or industrial companies are lagging far behind others in both stock awareness and in stock market participation. Therefore, the researcher recommends that the Public education program should target this category of companies.

Concerning the relationship between the directors' awareness of the stock market functioning and the level of organizations' participation in the Rwandan stock market Pearson's Correlations the relationship is significant. It is .795 with the level of significance is 0.000 less than 0.05 for correlation analysis. Therefore the relationship exists. The researcher recommends that the Public education program should target these directors in order to increase their companies' participation in the stock market.

Concerning the other possible reasons for non-participation listed in the Table 7, the researcher proposes a Public education program and outreach program: Since many companies still complains that they do not have sufficient information to be able to

participate on the stock market. The program may be scheduled to visit and bring more companies to the capital market in order to have more listed companies and have a vibrant secondary market, more securities and more participants. Large companies are not very many in the country, a direct contact should be made to attract them on an individually basis. Here the effort of CMAC should targeted more businessmen and companies especially industries.

The area of further research: The researcher takers this opportunity to request other researchers to embark on these findings and seek to improve stock market participation in Rwandan. Future research may focus on public awareness and financial literacy in small and medium business, households and individuals in order to complete this study.

Limitations of the Study

The possible threats to validity in this research were many. Some are the follows:

The absence or limited existing literature about Rwandan financial market may hinder this research because this kind of financial market is new in the country. The researcher use findings from similar researches to explain the phenomenon under the study;

Personality biases honesty of respondents and research assistants was beyond the researcher's control. To minimize such conditions, the researcher requested the respondents to be as honest as possible and to be impartial or unbiased when answering the questionnaire. Research assistants were oriented and briefed on the data gathering procedure;

The research environments are classified as uncontrolled settings where extraneous variables may influence on the data gathered such as comments from respondents, anxiety, stress, suspicion and motivation of respondents. In my case, It was noticed that some financial institutions have a policy of limiting access of their information only to those available on their website and deny any contact with researchers. This suspicious behavior of businesses made researching in developing countries as dangerous as reporting on front line of the war

because they confuse academic research and police or tax investigation. Although these are beyond the researcher's control, efforts were made in requesting respondents to be as objective as possible in answering the questionnaire.

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Appendix I - Multiple Comparisons between groups or sectors of activities of respondents

(ANOVA- Bonferroni)

A. :(average)Independent variables Stock market awareness of Directors						
(I) Sector of activity	(J) Sector of activity	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence interval	
					Lower Bound	Upper Bound
Insurance companies	Specialized Banks (BRD& BHR)	02778.	36130.	1.000	1.055-	1.1107
	Commercial Banks	04167. -	22125.	1.000	7048. -	6215.
	Microfinance Bank	02778.	36130.	1.000	1.055-	1.1107
	Telecommunication companies	61111.	28564.	517.	2450. -	1.4672
	Industries/ Manufacturing or Trading companies	*1.5104	18621.	000.	9523.	2.0685
Specialized Banks (BRD& BHR)	Insurance companies	02778. -	36130.	1.000	1.111-	1.0551
	Commercial Banks	06944. -	33797.	1.000	1.082-	9435.
	Microfinance Bank	00000.	44251.	1.000	1.326-	1.3263
	Telecommunication companies	58333.	38322.	1.000	5653. -	1.7319

	Industries/ Manufacturing or Trading companies	*1.4826	31614.	000.	5351.	2.4302
Commercial Banks	Insurance companies	04167.	22125.	1.000	6215. -	7048.
	Specialized Banks (BRD& BHR)	06944.	33797.	1.000	9435. -	1.0824
	Microfinance Bank	06944.	33797.	1.000	9435. -	1.0824
	Telecommunication companies	65278.	25548.	179.	1130. -	1.4185
	Industries/ Manufacturing or Trading companies	*1.5529	13549.	000.	1.1460	1.9582
Microfinance Bank	Insurance companies	02778. -	36130.	1.000	1.110-	1.0551
	Specialized Banks (BRD& BHR)	00000.	44251.	1.000	1.326-	1.3263
	Commercial Banks	06944. -	33797.	1.000	1.082-	9435.
	Telecommunication companies	58333.	38322.	1.000	5653. -	1.7319
	Industries/ Manufacturing or Trading companies	*1.4826	31614.	000.	5351.	2.4302
Telecommunication companies	Insurance companies	61111. -	28564.	517.	1.467-	2450.
	Specialized Banks (BRD& BHR)	58333. -	38322.	1.000	1.731-	5653.
	Commercial Banks	65278. -	25548.	179.	1.418-	1130.
	Microfinance Bank	58333. -	38322.	1.000	1.731-	5653.
	Industries/ Manufacturing or Trading companies	*89931.	22582.	002.	2225.	1.5761

Industries/ Manufacturing or Trading companies	Insurance companies	*1.5104-	18621.	000.	2.068-	9523. -
	Specialized Banks (BRD& BHR)	*1.4826-	31614.	000.	2.430-	5351. -
	Commercial Banks	1.552-	13549.	000.	1.958-	1.1460-
	Microfinance Bank	*1.4826-	31614.	000.	2.430-	5351. -
	Telecommunication companies	*89931. -	22582.	002.	1.576-	2225. -
B. Dependent variables (average): Organizations' stock market participation in Rwanda						
(I) Sector of activity	(J) Sector of activity	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence interval	
					Lower Bound	Upper Bound
Insurance companies	Specialized Banks (BRD& BHR)	02778.	33964.	1.000	9902. -	1.0457
	Commercial Banks	02778.	20798.	1.000	5956. -	6511.
	Microfinance Bank	61111.	33964.	1.000	4069. -	1.6291
	Telecommunication companies	*1.15278	26851.	001.	3480.	1.9575
	Industries/ Manufacturing or Trading companies	*1.70660	17504.	000.	1.1820	2.2312
Specialized Banks (BRD& BHR)	Insurance companies	02778. -	33964.	1.000	1.045-	9902.
	Commercial Banks	00000.	31770.	1.000	9522. -	9522.
	Microfinance Bank	58333.	41597.	1.000	6634. -	1.8301
	Telecommunication companies	*1.12500	36024.	034.	0453.	2.2047

	Industries/ Manufacturing or Trading companies	*1.67882	29718.	000.	7881.	2.5695
Commercial Banks	Insurance companies	02778. -	20798.	1.000	6511. -	5956.
	Specialized Banks (BRD& BHR)	00000.	31770.	1.000	9522. -	9522.
	Microfinance Bank	58333.	31770.	1.000	3689. -	1.5355
	Telecommunication companies	*1.12500	24016.	000.	4052.	1.8448
	Industries/ Manufacturing or Trading companies	*1.67882	12736.	000.	1.2971	2.0606
Microfinance Bank	Insurance companies	61111. -	33964.	1.000	1.629-	4069.
	Specialized Banks (BRD& BHR)	58333. -	41597.	1.000	1.830-	6634.
	Commercial Banks	58333. -	31770.	1.000	1.535-	3689.
	Telecommunication companies	54167.	36024.	1.000	5380. -	1.6214
	Industries/ Manufacturing or Trading companies	*1.09549	29718.	005.	2048.	1.9862
Telecommunication companies	Insurance companies	*1.15278-	26851.	001.	1.957-	3480. -
	Specialized Banks (BRD& BHR)	*1.12500-	36024.	034.	2.204-	0453. -
	Commercial Banks	*1.12500-	24016.	000.	1.844-	4052. -
	Microfinance Bank	54167. -	36024.	1.000	1.621-	5380.
	Industries/ Manufacturing or Trading companies	55382.	21227.	154.	0824. -	1.1900
Industries/ Manufacturing or	Insurance companies	*1.70660-	17504.	000.	2.231-	- 1.1820
	Specialized Banks (BRD&	*1.67882-	29718.	000.	2.569-	7881. -

Trading companies	BHR)					
	Commercial Banks	*1.67882-	12736.	000.	2.060-	- 1.2971
	Microfinance Bank	*1.09549-	29718.	005.	1.986-	2048. -
	Telecommunication companies	55382. -	21227.	154.	1.19-	0824.

.level 0.05The mean difference is significant at the .*

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